

toward the - terminal, through and including 71, 47, 35 amino acids before the first special amino acids. For example, the complete polypeptide comprises the peptide of 71 amino acids, where the first of the amino acid is T and the second is Q.

Please replace the paragraph beginning at page 13, line 30, with the following amended paragraph.

In a related aspect, the invention provides a polynucleotide comprising a nucleotide sequence that encodes a polypeptide as described in the preceding paragraphs. Such a polynucleotide is useful for recombinant expression of the polypeptide of the invention for use in APP processing assays. In addition, the polynucleotide is useful for transforming into cells to produce recombinant cells that express the polypeptide of the invention, which cells are useful in cell-based assays to identify modulators of APP processing. Thus, in addition to polynucleotides, the invention provides a vector comprising such polynucleotides, especially expression vectors where the polynucleotide is operably linked to a promoter to promote expression of the polypeptide encoded by the polynucleotide in a host cell. The invention further provides a host cell transformed or transfected with a polynucleotide ~~according to claim 14 of the invention or a vector according to claim 15 or 16 of the invention~~. Among the preferred host cells are mammalian cells, especially human cells.

21 22 1-28-08

Please replace the paragraph beginning at page 16, line 22, with the following amended paragraph.

The  $\beta$ -secretase cleavage site in APP is known, and it will be appreciated that the ~~assays assays~~ of the invention can be performed with either intact APP or fragments or analogs of APP that retain the  $\beta$ -secretase recognition and cleavage site. Thus, in one variation, the substrate polypeptide of the second composition comprises the amino acid sequence SEVNLDAEFR (SEQ ID NO: 63), which includes the  $\beta$ -secretase recognition site of human APP that contains the "Swiss" Swedish mutation. In another variation, the substrate polypeptide of the second composition comprises the amino acid sequence EVKMDAEF (SEQ ID NO: 67). In another variation, the second composition comprises a polypeptide having an amino acid sequence of a human amyloid precursor protein (APP). For example, the human amyloid precursor protein is selected from the group consisting of: